

AMENDMENTS

This listing of claims will replace all prior versions, and listings, of claims in the application:

In the Claims:

Claims 1-21 (cancelled)

Claim 22 (currently amended): A composition comprising a plurality of a conjugate, wherein said conjugate comprises:

a chemically defined valency platform molecule comprising branching groups, ~~wherein the valency of said platform molecule is predetermined by the number of branching groups and wherein the valency of said platform molecule is two four or more and, wherein the valency platform molecule has a single line of symmetry and wherein the valency platform molecule is chemically defined in that the number of branching groups pre-determines the valency of said platform molecule and location of number of attachment sites for biologically active molecules; and, and~~

a multiplicity of biologically active molecules conjugated to the chemically defined valency platform molecule at said attachment sites.

Claim 23 (previously presented): The composition of claim 22, wherein the branching groups are derived from a functional moiety selected from the group consisting of diamino acid, triamine, and amino diacid.

Claim 24 (previously presented): The composition of claim 22, wherein the biologically active molecules are the same.

Claim 25 (previously presented): The composition of claim 22, wherein said conjugate comprises two branching groups, providing a total of four attachment sites for the biologically active molecules.

Claim 26 (previously presented): The composition of claim 22, wherein the biologically active molecules comprise a polynucleotide.

Claim 27 (previously presented): The composition of claim 26, wherein the polynucleotide is a polynucleotide duplex.

Claim 28 (previously presented): The composition of claim 26, wherein the polynucleotide is a polynucleotide duplex of about 20 to about 50 bp in length.

Claim 29 (previously presented): The composition of claim 26, wherein the polynucleotide is synthetic.

Claim 30 (previously presented): The composition of claim 26, wherein the polynucleotide is prepared by molecular cloning.

Claim 31 (previously presented): The composition of claim 26, wherein the polynucleotide is a polynucleotide duplex having a B DNA type helical structure.

Claim 32 (withdrawn-currently amended) The composition of claim 22 or 64, wherein the biologically active molecule is selected from the group consisting of carbohydrates, lipids, lipopolysaccharides, peptides, proteins, glycoproteins, and drugs.

Claim 33 (previously presented): The composition of claim 22, wherein the biologically active molecule is selected from the group consisting of analogs of immunogens, haptens, mimotopes, and aptamers.

Claim 34 (previously presented): The composition of claim 22, wherein the chemically defined valency platform molecule is substantially nonimmunogenic.

Claim 35 (previously presented): The composition of claim 22, wherein the composition comprises a pharmaceutically acceptable carrier.

Claim 36 (withdrawn-currently amended): The composition of claim 35 or 77, wherein the composition is suitable for the suppression of antibody production.

Claim 37 (previously presented): The composition of claim 35, wherein the composition is suitable for injection.

Claim 38 (withdrawn-currently amended): The composition of claim 35 or 77, wherein the composition is suitable for the treatment of human systemic lupus erythematosus.

Claim 39 (previously presented): The composition of claim 22, wherein the conjugate comprises polyethylene glycol.

Claim 40 (previously presented): The composition of claim 22, wherein the valency platform molecule comprises polyethylene glycol.

Claim 41 (currently amended): The composition of claim 22, wherein the conjugate comprises ~~polyethylene glycol~~ a moiety having the formula $-\text{CH}_2(\text{CH}_2\text{OCH}_2)_r\text{CH}_2-$, wherein $r = 1$ to 300.

Claim 42 (currently amended): The composition of claim 22, wherein the valency platform molecule comprises ~~polyethylene glycol~~ a moiety having the formula $-\text{CH}_2(\text{CH}_2\text{OCH}_2)_r\text{CH}_2-$, wherein $r = 1$ to 300.

Claim 43 (previously presented): The composition of claim 22, wherein the valency platform molecule comprises triethylene glycol.

Claim 44 (withdrawn-currently amended): A method of making the composition of claim 22 or 64, the method comprising forming said conjugates by covalently bonding the biologically active molecules to the chemically-defined valency platform molecule to form a conjugate.

Claim 45 (withdrawn-currently amended) A method of making the composition of claim 22 or 64, wherein the biologically active molecule is a polynucleotide duplex, the method comprising forming said conjugates by:

reacting a multiplicity of single-stranded polynucleotides, each of which is at least about 20 nucleotides in length and has a functional group at or proximate one of its termini, with functional groups on the chemically-defined valency platform molecule to form the conjugate; and

annealing complementary single-stranded polynucleotides to the single-stranded polynucleotides conjugated to the chemically-defined valency platform molecule to form pendant chains of double-stranded DNA.

Claim 46 (previously presented): The composition of claim 22, wherein the conjugate comprises triethyleneglycol.

Claim 47 (previously presented): The composition of claim 22, wherein the valency platform molecules have substantially homogeneous molecular weight.

Claim 48 (previously presented): The composition of claim 22, wherein the biologically active molecules are located at one end of the platform molecule.

Claim 49 (previously presented): The composition of claim 22, wherein the biologically active molecules are located at both opposing ends of the platform molecule.

Claim 50 (previously presented): The composition of claim 22, wherein said valency platform molecule comprises at least one terminal branching group, wherein said terminal branching group is bifurcated, thereby providing two attachment sites for said biologically active molecules.

Claim 51 (withdrawn-currently amended): The composition of claim 35 or 77, wherein the composition is suitable for reducing antibody levels.

Claim 52 (withdrawn-currently amended): The composition of claim 35 or 77 wherein at least one molecule of the biologically active molecules is an analog of an immunogen that binds specifically to an antibody to which the immunogen binds specifically and lacks T cell epitopes.

Claim 53 (withdrawn-currently amended): The composition of claim 35 22 or 64, wherein the composition is suitable for reducing antibody levels.

Claim 54 (currently amended): The composition of claim 22, wherein the conjugate comprises linking moieties bound to ~~termini of the branching groups~~ the valency platform molecule and to the biologically active molecules.

Claim 55 (currently amended): The composition of claim 24 wherein the conjugate comprises linking moieties bound to ~~termini of the branching groups~~ the valency platform molecule and to the biologically active molecules.

Claim 56 (previously presented): The composition of claim 24 wherein the valency platform molecules have substantially homogeneous molecular weight.

Claim 57 (currently amended): The composition of claim 56 wherein the conjugate comprises linking moieties bound to ~~termini of the branching groups~~ the valency platform molecule and to the biologically active molecules.

Claim 58 (previously presented): The composition of claim 24, wherein the biologically active molecules comprise a polynucleotide.

Claim 59 (currently amended): The composition of claim 58, wherein the conjugate comprises linking moieties bound to ~~termini of the branching groups~~ the valency platform molecule and to the biologically active molecules.

Claim 60 (previously presented): The composition of claim 58, wherein the valency platform molecules have substantially homogeneous molecular weight.

Claim 61 (currently amended): The composition of claim 60, wherein the conjugate comprises linking moieties bound to ~~termini of the branching groups~~ the valency platform molecule and to the biologically active molecules.

Claim 62 (previously presented): The composition of claim 22 wherein the branching groups are derived from trivalent functionalized branching moieties, thereby doubling the valency of said platform molecule.

Claim 63 (previously presented): The composition of 24 wherein the biologically active molecules are identical.

Claim 64 (new): A composition comprising a plurality of a conjugate, wherein said conjugate comprises:

a chemically defined valency platform molecule comprising branching groups, wherein the valency of said platform molecule is four or more and wherein the valency platform molecule is chemically defined in that the number of branching groups pre-determines the number of attachment sites for biologically active molecules and wherein the valency platform molecule further comprises a moiety of the formula $-OCH_2CH_2O-$; and

a multiplicity of biologically active molecules conjugated to the chemically defined valency platform molecule at said attachment sites.

Claim 65 (new): The composition of claim 64, wherein the valency platform molecule has a single line of symmetry.

Claim 66 (new): The composition of claim 64, wherein the biologically active molecules are the same.

Claim 67 (new): The composition of claim 64, wherein said conjugate comprises two branching groups, providing a total of four attachment sites for the biologically active molecules.

Claim 68 (new): The composition of claim 64, wherein the biologically active molecules comprise a polynucleotide.

Claim 69 (new): The composition of claim 68, wherein the polynucleotide is a polynucleotide duplex.

Claim 70 (new): The composition of claim 68, wherein the polynucleotide is a polynucleotide duplex of about 20 to about 50 base pairs in length.

Claim 71 (new): The composition of claim 68, wherein the polynucleotide is synthetic.

Claim 72 (new): The composition of claim 68, wherein the polynucleotide is prepared by molecular cloning.

Claim 73 (new): The composition of claim 68, wherein the polynucleotide is a polynucleotide duplex having a B DNA type helical structure.

Claim 74 (new) The composition of claim 64, wherein the branching groups are derived from a functional moiety selected from the group consisting of diamino acid, triamine, and amino diacid.

Claim 75 (new): The composition of claim 64, wherein the biologically active molecule is selected from the group consisting of analogs of immunogens, haptens, mimotopes, and aptamers.

Claim 76 (new): The composition of claim 64, wherein the chemically defined valency platform molecule is substantially nonimmunogenic.

Claim 77 (new): The composition of claim 64, wherein the composition comprises a pharmaceutically acceptable carrier.

Claim 78 (new): The composition of claim 64, wherein the conjugate comprises polyethylene glycol.

Claim 79 (new): The composition of claim 77, wherein the composition is suitable for injection.

Claim 80 (new): The composition of claim 64, wherein the valency platform molecule comprises polyethylene glycol.

Claim 81 (new): The composition of claim 65, wherein the conjugate comprises a moiety having the formula $-\text{CH}_2(\text{CH}_2\text{OCH}_2)_r\text{CH}_2-$, wherein $r = 1$ to 300.

Claim 82 (new): The composition of claim 65, wherein the valency platform molecule comprises a moiety having the formula $-\text{CH}_2(\text{CH}_2\text{OCH}_2)_r\text{CH}_2-$, wherein $r = 1$ to 300.

Claim 83 (new): The composition of claim 64, wherein the biologically active molecules are located at one end of the valency platform molecule.

Claim 84 (new) The composition of claim 64, wherein the valency platform molecule comprises triethylene glycol.

Claim 85 (new): The composition of claim 64, wherein the conjugate comprises triethyleneglycol.

Claim 86 (new): The composition of claim 64, wherein the valency platform molecules have substantially homogeneous molecular weight.

Claim 87 (new): The composition of claim 64, wherein the biologically active molecules are attached to termini of the valency platform molecule.

Claim 88 (new): The composition of claim 64, wherein the biologically active molecules are located at both opposing ends of the platform molecule.

Claim 89 (new): The composition of claim 64, wherein the conjugate comprises linking groups bound to the valency platform molecule and to the biologically active molecules.

Claim 90 (new): The composition of claim 66, wherein the conjugate comprises linking moieties bound to the valency platform molecule and to the biologically active molecules.

Claim 91 (new): The composition of claim 66, wherein the valency platform molecules have substantially homogeneous molecular weight.

Claim 92 (new): The composition of claim 91, wherein the conjugate comprises linking moieties bound to the valency platform molecule and to the biologically active molecules.

Claim 93 (new): The composition of claim 66, wherein the biologically active molecules comprise a polynucleotide.

Claim 94 (new): The composition of claim 93, wherein the conjugate comprises linking moieties bound to the valency platform molecule and to the biologically active molecules.

Claim 95 (new): The composition of claim 93, wherein the valency platform molecules have substantially homogeneous molecular weight.

Claim 96 (new): The composition of claim 95, wherein the conjugate comprises linking moieties bound to the valency platform molecule and to the biologically active molecules.

Claim 97 (new): The composition of 66, wherein the biologically active molecules are identical.

Claim 98 (new): The composition of claim 22, wherein the valency platform molecule further comprises a moiety of the formula -OCH₂CH₂O-.